

Technical Manual

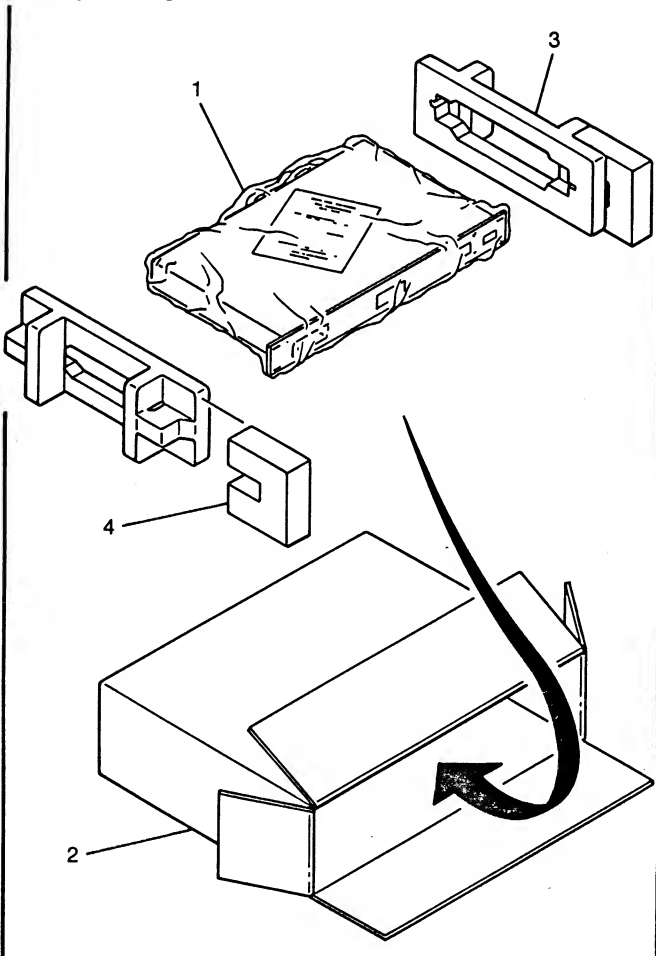
AUDIO DIGITAL TC-4 BROADCAST DIGITAL PROCESSOR



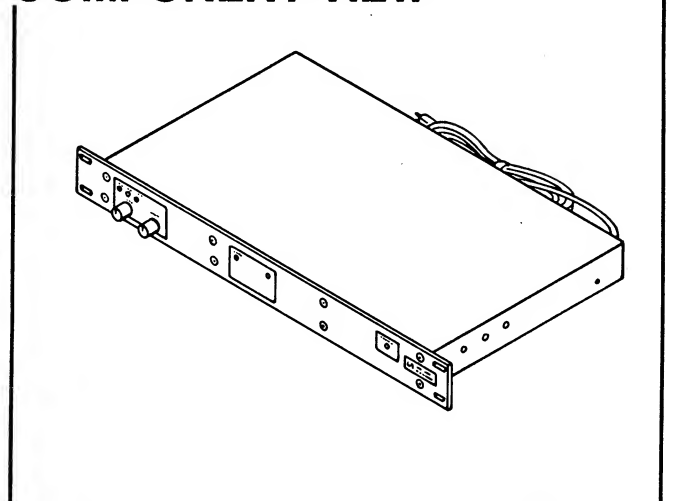
SPECIFICATIONS

- 20-15 kHz bandwidth
- Less than .2 THD + noise @ 1 kHz
- 85 dB dynamic range (A-weighted)
- Balanced inputs and outputs
- Input gain display, as well as independent control of input and output gain
- Display of active and catch-up status
- Dump system is remotable to your system
- One rack space
- THD & Noise: Less than .2 THD + noise @ 1 kHz
- Frequency Response: 20-15 kHz bandwidth
- Dynamic Range: 85 dB, A-weighted
- Delayed Capacity: - 6.8 Seconds standard
- Active Balanced Inputs: (1/4" stereo jack) 50k ohm (can also be unbalanced using mono 1/4" plug)
- Active Balanced Outputs: (1/4" stereo jack) (can also be unbalanced using mono 1/4" plug) 100 ohm impedance will drive 10k ohm load to +21 dB (at clipping) will drive 600 ohm load to + 18 dB (at clipping)
- Power Supply: 80 Volts AC-145 Volts AC 195 Volts AC-240 Volts AC
- Dimensions: Standard rack mount 44mm x 482mm x 257mm D (1.75 x 19.0 x 10.12 in. D)
- Shipping Weight: 12 lbs. (5.4 kg.)
- Stereo Operation: Low cost option, allows stereo operation using 2-TC-4
- Build-Out Card: Allows delay to start near real-time upon activation with user adjustable buildout rate to full delay time
- Features:
 - stepless, glitchless delay build-out
 - user adjustable build-out rate (TC-4 goes to real-time during memory dump)
 - stereo synch option
- Warranty Information: Refer to the Warranty Statement packed with each product

PACKAGE



COMPONENT VIEW



COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	550-1824-03	1	POLY BAG, 16x24x.004
2	550-1000-00	1	SHIPPING CARTON, ADD SERIES
3	550-0002-00	2	SHIPPING INSERT, UNIV, POLYFOAM
4	550-0003-00	2	SHIPPING INSERT, TCX FILL BLOCK
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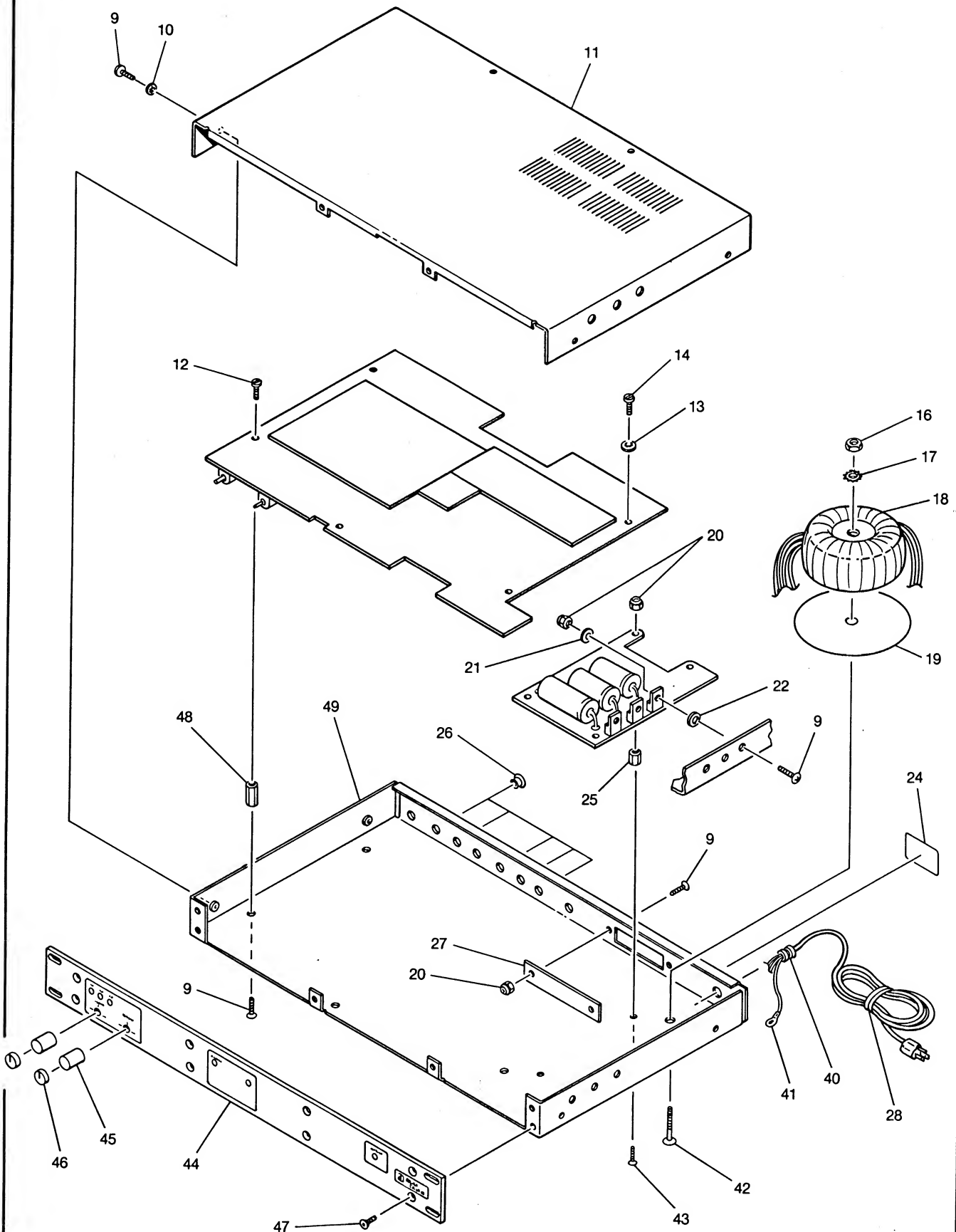
COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
9	530-2440-31	10	4-40x3/8 PHILLIPS PH BLK OXIDE
10	540-0305-00	6	WASHER, #4, INT. TOOTH, LCK, BLK OX.
11		1	LID
12	530-2440-25	4	SCREW, 4-40x3/8, SLT'D PH, NYLON
13	540-0306-00	1	WASHER, #6, EXT. TOOTH, LOCK
14	530-3440-25	3	SCREW, 4-40x.250, SLT'D PH, STEEL
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16	535-1032-00	1	NUT, 10-32, HEX
17	540-0310-01	1	WASHER, #10, EXT TOOTH, LOCK
18	610-2092-02	1	TRANSFORMER, AC LINE, TOROIDAL
19	595-2345-00	1	INSUL., TCXA/D, 10 MIL RAG PAPER
20	535-1440-00	9	NUT, 4-40 HEX, SELF LK, NYL. INSRT
21	540-0304-00	3	WASHER, #4 SHLDR, INSUL. FIBER
22	540-0220-02	3	WASHER, TO-220, INSUL. MYLAR
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24	590-2345-00	1	SERIAL NO. PLATE, ADHES, CUSTOM
25	527-0250-25	4	SPACER, .250x1/4 HEX, 4-40, ALUM
26	590-0375-00	5	HOLE PLUG, .375 DIA, BLK PLASTIC
27	520-0345-00	1	HOLE COVER, TC-X
28	450-0775-03	1	CORD, AC LINE, 6', 18/3 SJ, MLD END
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40	590-0005-00	1	STRAIN RELIEF, PLASTIC
41	540-0104-00	1	SOLDER LUG, #4 STAR WASHER, BNT
42	530-1032-15	1	SCREW, 10-32x1.50, SKT FLT HD, BLK
43	530-1440-50	4	SCREW, 4-40x.625, SOC BTN HD, BLK
44	515-0004-00	1	FACEPLATE, TC-4
45	560-0110-00	2	KNOB, 11 MM, PLAIN

ITEM	PART NO.	QTY	DESCRIPTION
46	561-0111-00	2	CAP, 11 MM, BLK, W/LINE
47	530-0632-37	8	SCREW, 6-32x.375, SKT FLT HD, BLK
48	527-0812-25	5	SPACER, .812x1/4 HEX, 4-40, ALUM
49	505-0345-01	1	CHASSIS, TC-X
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58	422-0003-00	2	JACK, 1/4 PHONE, 3 CON, PC MNT
59	340-4016-00	1	I.C., QUAD ANALOG SWITCH
60	425-1115-05	1	HEADER, 15 PIN, 1.05, TIN
61	325-0072-01	1	I.C., DUAL OP-AMP, HIGH SPEC
62	TC-4A	1	CATCH UP BOARD
63	335-0005-00	1	I.C., HEX INVRT, OPEN COLLECTOR
64	325-0555-00	1	I.C., TIMER SSS
65	422-0003-02	1	JACK, 1/4 PH, 3 CON SHTG, PC MNT
66	420-0001-00	2	SOCKET, FUSE CLIP
67	640-0250-01	1	FUSE, AGC, 1/4 A, 250V, SLO BLO
68	325-7915-00	1	VOLTAGE REGULATOR, -15V, T0220
69	325-0340-00	1	VOLTAGE REGULATOR +15V, T0220
70	325-0350-00	1	VOLTAGE REGULATOR, ADJ., T0220
71	140-0502-02	1	POT, 5K, TRIMMER, 10%
72	240-0225-00	4	CAPACITOR, 2.2μF, 35V, TANTALUM
73	210-0228-50	2	CAPACITOR, 2200μF, 50V, ELECTROL.
74	310-5392-01	14	DIODE, PWR RECTIF., 1.5 AMP, 100V
75	210-0478-35	1	CAPACITOR, 4700μF, 35V, ELECTROL.
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79	130-1831-00	2	POT, 25K, LOG, 20%
80	312-5086-01	2	DIODE, LED, RED, T1
81	312-5286-01	4	DIODE, LED, GREEN, T1
82			

AUDIO DIGITAL TC-4

COMPONENT EXPLODED VIEW



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CIRCUIT BOARDS

